

PERIODICAL ROOM
LIBRARY

MARCH, 1923

830

• THE • AMERICAN • SCANDINAVIAN REVIEW



TRAVEL IN THE NORTH

Leidra the Early Viking Capital of Denmark

By Rail and Trail Over Dovre

A Botanist in Jotunheimen

The Cruise of the Dana



One of 375 Illustrations in a 660 Page Book

Scandinavian Art

By Carl G. Laurin of Sweden, Emil Hannover of Denmark, and Jens Thiis of Norway

THERE are no better known writers on Scandinavian Art than the three contributors to this volume. Each has written on the art of his own country, reviewing the great achievements of his countrymen in the fields of painting, sculpture and architecture and selecting for illustration of the book the most characteristic and beautiful examples of the work of each artist. The Foundation takes pride in this book not only because of the distinction of the contributors to it and because of the abundance of clear and ideal illustrations, but also because it represents a high standard of book making and years of painstaking editorial work. An introduction correlating the three national sections has been written by the American critic, Dr. Christian Brinton. The jacket, a striking design of an on-coming Viking ship, has been executed by Trygve Hammer.

This book does more to take the mind of the reader to the countries of the North than any number of books of travel. He sees these countries as their own greatest artists see them. It is a book he will wish to own and to pass on to his friends.

It is only because the book is partially endowed that it is sold at \$8.00.

The Publication Committee

SEND ORDERS TO

THE AMERICAN-SCANDINAVIAN FOUNDATION
25 WEST 45TH STREET NEW YORK

London: Humphrey Milford, Oxford University Press

CONTRIBUTORS TO THIS NUMBER OF THE REVIEW

MAURICE P. DUNLAP is now American counsel at Bangkok, Siam. Since 1915 he has been assigned to various posts in the American consular service in all three of the Scandinavian countries, the last being in Copenhagen, which he left to go to Siam. He has written extensively for New York and Chicago newspapers as well as for various American magazines.

JOHN W. HARSHBERGER is professor of botany in the University of Pennsylvania. He traveled in the Scandinavian countries last summer with a special stipend from the American-Scandinavian Foundation to inves-

tigate in particular the presence of American plants there. This mission is part of a larger plan including various countries of the world. Professor Harshberger will leave next summer for France and Spain, where he will carry on similar investigations.

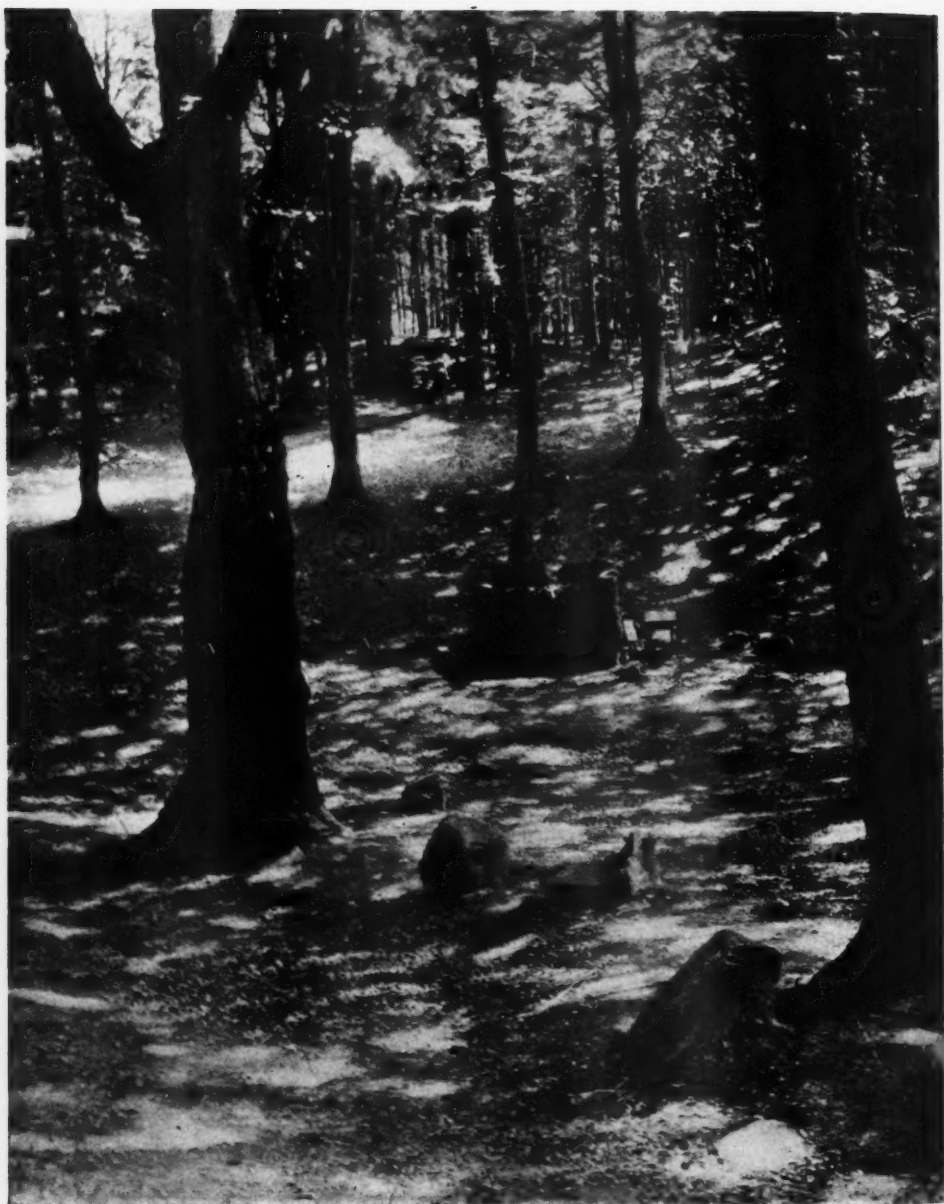
Å. VEDEL-TÅNING is one of the younger men of science in Denmark. Since 1918 he has held an appointment under the Danish Committee for the Study of the Sea. He has published among other things several papers on groups of deep sea fish. He was a member of the *Dana* Expedition of 1921-1922, which he describes.

THE GÖTEBORG NUMBER

The April Number will be devoted chiefly to articles suggested by the coming Exposition in Göteborg, which is attracting visitors not only from all over Sweden but from America as well as from Norway and Denmark. The interesting chapter of history connected with the old seaport town will be

told; the exhibition proper will be described with full page illustrations from the etchings of the Swedish artist Molin; and the beauty of the surrounding country with its numerous historic spots will be described in word and picture.





THE SACRED DELL AT LEIDRA SEEN FROM THE HEATHEN ALTAR. THE BROKEN PIECES OF
STONE ARE THE ORIGINAL ALTAR. THE SITE IS STILL A POPULAR PLACE FOR OPEN AIR
MEETINGS, AND THE TABLE AND BENCH IN THE MIDDLE OF THE PICTURE SHOW WHERE THE
LAST GATHERING HAS BEEN HELD

THE AMERICAN-SCANDINAVIAN REVIEW

VOLUME XI

MARCH, 1923

NUMBER 3

Leidra

The Early Viking Capital of Denmark

By MAURICE P. DUNLAP

An hour's ride by train from Copenhagen is a village of a few houses called Leire, which most probably marks the spot of the once famous *Leidra*, capital of the early Vikings. It was here the castle stood which the Danish hero Rolf Krake defended as told in the Norse saga, the *Biarkamal*—the "hall called Heorot," where the hero of the old English epic *Beowulf* is also supposed to have won his laurels. Just where this building was situated has been a question of interest for many an antiquarian, but as the noble pile was destroyed by fire in about the year 500 A. D., there has been time for several opinions to form regarding its location.

Looking down the winding road from the station, one sees a typical Danish countryside, peaceful and prosperous, a few quaint thatched dwellings with neat little gardens, fields, a marshland, a church spire, a brook gliding under a stone bridge and—the only really noteworthy feature—an avenue of stately linden trees stretching for several miles across the country from the dimly discerned Roskilde cathedral to a dense wood. Nothing suggests the glories of a heathendom which still survives so magnificently in the song and saga of many lands.

Let us cross the stream that dwindles away into marshland. Here was once a river, probably big enough for the Viking boats that came sailing up to Leidra. Beyond is the fjord. Like other capitals of the Norse sea-kings, Leidra was built at the end of a deep inlet; those who knew the waterways readily found access to the town, but an enemy might have sailed many times around the bay and never have discovered the proper channel. Leidra is now much farther from the fjord



THE "KING'S STONE," WHERE ACCORDING TO TRADITION THE EARLY VIKING RULERS WERE PROCLAIMED, MARKS THE MOST PROBABLE SITE OF THE ANCIENT CASTLE. DETAILS OF THE STONE FLOOR ARE SEEN IN THE VIEW ON THE OPPOSITE PAGE

than it used to be; wharves and stone bridges have been excavated a yard deep in the marsh.

Along the single lane bordered with white cottages we come, until we reach a tumble-down hut which stands alone in an unkempt yard. It seems almost as though its well groomed neighbors have withdrawn

in contempt from such a disreputable looking companion, but more probably in awe than in contempt; for the spot in local tradition is sacred—the site of the famous castle, the hall which according to the Beowulf epic, was "built of wood but adorned with gold so that its light shone out over the land."

A flat worn rock in the yard is called the King's Stone, pointed out as the place where rulers were proclaimed according to the ancient custom. Closer observation reveals



ENTRANCE TO ONE OF THE GRAVES NEAR LEIDRA. WITHIN IS A CHAMBER WALLED IN BY MASSIVE STONES. THIS PROBABLY ANTEDATES THE EARLIEST VIKING LEIDRA BY CENTURIES, BUT IT WAS MOST LIKELY ALSO USED BY THE VIKINGS



THE REMAINS OF THE ANCIENT STONE FLOOR ARE THE MOST REMARKABLE FEATURE OF THE SPOT WHERE ACCORDING TO TRADITION THE CASTLE OF LEIDRA STOOD

under a growth of weeds the remains of a stone pavement covering considerable area. Beowulf's men when marching toward the castle came "over a road of many-colored stones, their coats of mail glittering and the iron rings of their armor rattling as they strode." Perhaps it was over the same pavement? Perhaps not?

Now that we are in the village, we can see that this is no ordinary countryside after all. Across the brook are a number of interesting-looking mounds and stones; in fact the whole landscape is dotted with them. Most impressive is the long, high Horse Hill that suggests a one-time rampart. It is haunted they say; within sits a dead king fully armed on horseback. Archæologists state that this weird formation dates back to the Stone Age, and yet it has evidently been used for various purposes by other ages, for remnants of Viking pomp have been dug from it—gold plates, a drinking cup, amber, beads of glass—



THIS IMPRESSIVE STONE CIRCLE IS SUPPOSED BY SOME AUTHORITIES TO BE THE SITE OF AN OPEN AIR COUNCIL, WHILE OTHERS BELIEVE IT TO HAVE BEEN THE FOUNDATION OF A MIGHTY BUILDING IN VIKING TIMES. IN THE BACKGROUND IS THE LINDEN AVENUE LEADING TO THE PRESENT CASTLE

mosaic, crystals, bars of iron, and silver. A miserable looking stone in some one's back yard bears the haughty name of the Queen's Chair. It has indeed lost prestige since the proud Leidra queens gazed from it over the heads of an expectant populace.

More dignity is still attached to a number of the royal graves along the stream. These bear romantic sounding names, recalling the valor of many a noble thane; but even more suggestive are the names of other mounds, Wrestling-match Hill, for instance, where games and tournaments are said to have taken place, or Church Hill where the first Christian priests tried to build a place of worship, but every night the work done the previous day was mysteriously destroyed until the project was abandoned. The dethroned Viking gods would not tolerate this profaning of their most sacred retreat!

For the story goes that when Denmark denied its ancient faith, the former deities and heroes became trolls and sought refuge under the Leidra hills. Strange beacons sometimes burn on those mounds, especially on foggy nights when the Marsh Woman brews and the misty elf maidens float over the land. Peasants still put scissors or needles in the cradles of new-born babes to keep the hill-people away until the child is baptized. Similar superstitions are found in other parts of Denmark, but they linger most persistently around Leidra.

Another possible site where some authorities have located the "Gold Hall" is at the juncture of two small streams where a circle of flat, massive stones stands on a peninsula of higher land. Some claim that this was the meeting-place of Leidra's City Council, but others identify it as the foundation of the renowned building. Two other spots in the neighborhood show traces of having been castle sites, but local tradition favors the "Kongsgaard," where the tumble-down hut now broods.

The strangest of all suppositions about the much discussed hall is that it was really a temple! Religious celebrations of those days are known to have been attended with feasting, merrymaking, and debauchery. Not only the sacrifices but the main festivities took place in and around the temple. A German historian of about the year 1000 A. D. writes:

"There is a place in those regions which is the capital of the realm called *Lederun* where every ninth year, in the month of January, they assemble together and sacrifice to their gods: 99 men and as many horses, dogs, hawks, and cocks, believing that these will be of service to them in the realm of the dead."

The old English name for the Beowulf Hall was *Heorot*, meaning the Hall of the Hart, and it was described as being decorated with stag horns; one antiquary thinks that it was no other than a temple dedicated to the worship of the deer. Stag-horns dug from the Leidra mounds can be seen in the museum of relics from that vicinity. This

*Photograph by Ejnar Gregersen*

THE PRESENT CASTLE OF LEDREBORG BEARS IN ITS NAME A REMINISCENCE OF LEIDRA

collection is found at the present castle of Leidra which lies a mile or so from Leire village, at the end of the linden avenue one notices from the railway station.

Let us proceed down this avenue, into the dense wood which completely hides the castle from view. Suddenly we are confronted by massive iron gates on which are emblazoned the arms of the Count of Holstein-Ledreborg, the present owner. Passing the magic portal, we are in a paradise of old-fashioned gardens, terraces, hedge-lined avenues, paths leading to fountains or statues hidden in rustic retreats, the ivy-clad walls of the Ledreborg — a chateau-like structure of the French style of 1750—dominating the whole from the brink of a steep ravine. But this is not the original building that occupied this spot; there was an older—and perhaps a still older castle there. No one knows how far back in antiquity the foundations upon



THE PORTALS OF LEDREBORG CASTLE EMBLAZONED WITH THE ARMS OF THE PRESENT OWNER, COUNT HOLSTEIN-LEDREBORG

which the present structure is built may date their history.

Let us take a stroll through the Ledreborg estate; it is really quite extensive. Leaving the more cultivated, formal gardens, we skirt a ploughed field in the middle of which are two mounds covered with tall trees, which have been *fredet*—that is, they cannot be disturbed according to law. Many such barrows in Denmark have been opened and have yielded much of historical interest, but the wise policy of the government conserves others for the enlightenment of future antiquarians. Sphinxes with potential voices from the past!

Suddenly we plunge into a dell and find ourselves in the forest primeval. The still coolness of the grove suggests the interior of some dark, restful cathedral, the tall stems of single trees supporting a lofty, leafy roof. A sunbeam steals in here and there as through some colored pane and flecks the mossy floor with blotches of light. It lacks but an altar to complete this place of worship. But wait—over-looking the glen there *is* an altar. It is made of large hewn stones with steps leading to it, and now you will realize that you are in the Hertha Dale, where ancient Leidra is said to have offered sacrifices to strange gods.

I have asked the present owner of the estate, Count Holstein-Ledreborg, about the forms of worship which history and tradition ascribe to the Hertha Dale. The remarks of the German historian previously quoted relate to the later Viking period, but it seems that Tacitus in the time of Christ shed light on the subject also. He tells of an isle in the northern ocean where the Angles worshipped *Hertha* (Eartha—Earth), the Goddess of Fertility. Her image was drawn in a car by oxen and attended by women slaves, who bathed the idol in a sacred lake, but were later drowned in the lake because they had touched the image. Excavations near this lake—now a tiny pond which drowns in the shadows of the woodland—have revealed the bones of human beings and horses. Other excavations in the vicinity reveal not only relics from the later Viking Age, but Roman coins and household articles, jewelry, and hand-hewn axes.

"The altar," explained the Count, "is, alas, not the original one. An energetic gardener some hundred years ago thought he could improve on



THE RESTORED HEATHEN ALTAR IN
HERTHA DALE

the ancient one, the remains of which still lie on the slope where he discarded them. The new altar marks the spot in a fitting manner, but the people of Leidra hardly cut their stones so exactly or put cement between!"

No Hertha is found in the Scandinavian cycle of gods, but there are many references in Norse legend to the sacred groves where the thanes paid their sacrificial respects to Odin and Thor. Such a grove was undoubtedly the Hertha Dale. The *Biarkamal* speaks of Odin as the "war-god at Leidra," and the Beowulf saga tells how the "spear-armed Danes" vowed "glorious sacrifices at the shrines of their idols." Earlier inhabitants of Leidra may have trailed Hertha's car through those glades, but it was surely Odin that was most honored by the Viking worshippers of later days.



Memories of Ole Bull

It is pleasant to know that the State of Pennsylvania is taking steps to conserve the mementoes of that most romantic episode in early Norwegian-American history, the founding of a colony in the northern part of the State by Ole Bull, a little over seventy years ago. Of the four villages laid out by the great violinist, Oleana, New Norway, New Bergen, and Walhalla, nothing remains except a shed or barn where some of the colonists spent the winter of 1852-1853, and this is in a bad state of dilapidation. But though the attempt for various reasons proved abortive, and the traces of colonization have almost disappeared, the colony was surrounded by the nimbus of Ole Bull's personality and was not without its effect in drawing attention to his country.

The revival of interest in the historic spot is largely due to the efforts of Colonel Henry W. Shoemaker, owner and publisher of the *Altoona Times-Tribune*. As member of the State Forest Commission Colonel Shoemaker had occasion to call the matter to the attention

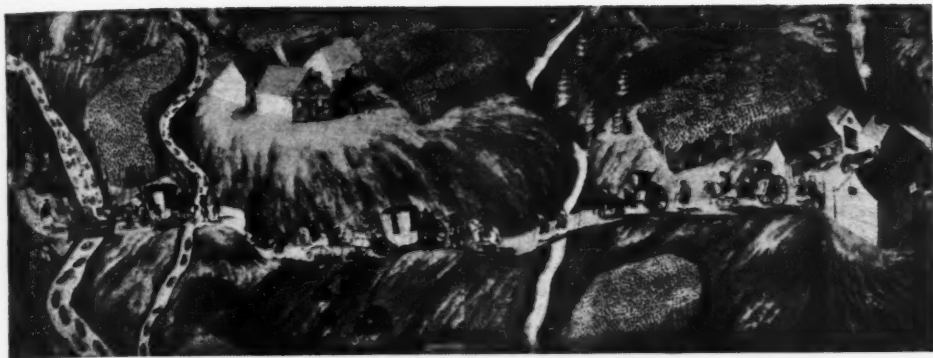
of Gifford Pinchot when the latter became chief forester of Pennsylvania, in 1920. Mr. Pinchot, who is not only a conservationist and an outdoor man but also a lover of music, paid several visits to the site of the Ole Bull colony, and in July of the same year, when the place was dedicated as a State park and recreation centre, pronounced an impressive tribute to the memory of the great Norwegian musician. Another eulogy was delivered by Governor William C. Sproul, noted for his efforts to preserve the traditions of the Swedish settlements on the Delaware.

In the new forestry law of 1921 Mr. Pinchot had the Ole Bull site withdrawn from the state forests and made into a State monument in perpetuity, the bill being signed by Governor Sproul. Rapid strides have since then been made toward developing the park, by the erection of parking places for automobiles, cabins, cook-stoves, benches, and spring-houses for tourists and campers. Lyso Spring, Ole Bull's favorite source, has been appropriately marked, and typical Norwegian trees planted along the driveways. Last November Colonel Shoemaker, whose home is at Altoona, presented the State with a large Norwegian flag to be flown side by side with the Stars and Stripes on the ramparts which Ole Bull built below his "castle." It was hoisted on Ole Bull's birthday, February 5, when some of his descendants who are now in the service of the State Forestry Department held an informal celebration there. In 1916 the singer Miss Emma Thursby, who accompanied Ole Bull on his last concert trip in 1880, visited the castle with Colonel Shoemaker, and sang some of the master's favorite Norwegian airs from the castle walls.

Friends of the Ole Bull park hope that now, with Gifford Pinchot governor of Pennsylvania, even more active measures will be taken to popularize the site as a historic shrine. The governor and his wife are both lovers of Norwegian literature and music and have travelled extensively in Norway.



THE ONLY REMAINING COTTAGE OF THOSE BUILT BY THE OLE BULL COLONISTS. THE PICTURE WAS TAKEN LAST NOVEMBER WITH COLONEL SHOEMAKER IN THE CENTER ACCOMPANIED BY TWO OTHER MEMBERS OF THE PENNSYLVANIA DEPARTMENT OF FORESTRY



CHRISTIAN VI'S TOUR ACROSS DOVRE IN 1733. FROM A CONTEMPORARY ILLUSTRATION

By Rail and Trail Over Dovre

By a Staff Correspondent

The tourist who crosses Dovrefjell on the new railroad is on ancient historic ground. According to the official publication of the State railways, the track follows the oldest travelled road in Norway. The Dovre range, running from Romsdalen in the west to Österdalen in the east, separates the northern from the southern part of the country. As far back as we have any knowledge, people have crossed it on foot, on horseback, and on skis, going from the important town of Nidaros (Trondhjem), through the broad valley of Gudbrandsdalen, on to Oslo and the region around the Christianiafjord. Armies have passed there; kings have gone there on their road to conquest, the first of whom we have any record being Harold the Fair-haired, who went north over Dovre to subjugate Trondhjem in his campaign to unite all Norway in one kingdom.

Pilgrims, following in the footsteps of St. Olaf, wore tracks over the mountains on their way to the shrine of the saint at Nidaros. In the famous debate between the two royal brothers, Eystein and Sigurd the Crusader, Eystein boasts of how, while Sigurd was "sending Saracens to the devil in Turkland," he provided for the comforts of his people at home. "There was much travel to Trondhjem," he says, "and in crossing the mountain people often slept out and suffered much hardship. I built shelters for them and gave gifts for their upkeep." These shelters, built in the early part of the twelfth century, were the origin of the mountain stations which have cared for travellers down to our time and are still favorite resorts for those who seek health or recreation or sport in the mountains. The names have been perpetuated in the stations of the new railroad, at least one of them, Hjerkin, dating back from the twelfth century, when it was men-

tioned in Sverre's saga. The others, too, are of ancient date.

Sigrid Undset in *Kristin Lavransdatter* makes use of Dovre as a background. Kristin's parents, Lavrans and Ragnfrid, walk barefoot over the mountain from Gudbrandsdalen to Trondhjem carrying their little crippled daughter, Ulfhild, between them to seek healing at the shrine of St. Olaf. In the afternoon of her own life, Kristin walks there with an international party of pilgrims, sleeps in one of the shelters, and lends her fur-lined cloak to a southerner who has come unprepared for the bitter cold of the night on the mountain. In the early part of the book, her childish ears are filled with tales of outlaws and of trolls and kelpies who have their haunts there. The episode of Kristin's young friend, Arne, who points to the place where the king's falconers are stationed and who has ambitions to become a falconer himself, recalls the historic fact that a very high class of falcons were actually caught in the Dovre mountains and exported to the courts of Europe to be used in the sports of kings. Later, when the witch mania swept Norway in common with the rest of Europe, Dovre was looked on as the home of the broom-stick troupe much as Blocksberg was in more southerly latitudes. Ibsen followed the tradition with his Hall of the Dovre King in *Peer Gynt*. The name Trollheimen still reminds us of the old superstitions.

These superstitions could survive so long, because there was no road except the mountain path through unpopulated regions. Not before the nineteenth century was even a fair wagon road built. During the four hundred years of Denmark's union with Norway, four royal visits to Trondhjem by way of the ancient Dovre road are recorded. From one of these the pleasant old station Kongsvoll has its name. When Christian V crossed the mountain in 1685, great praise was given the king for daring to sit on his horse in the most awful hills where his courtiers were glad to walk. In 1733, when Christian VI came over the same road with a large retinue, it had been improved so that great lumbering chariots with outriders could be used, but in the notorious "Vaarstigen" the queen and her ladies had to be carried in chairs. Even in the middle of the nineteenth century the trip between Christiania and Trondhjem consumed eight days, and in the worst hills it was necessary to steady the vehicles by tying ropes to the wheels when going down hill.

The location of Dovre in the centre of the country, its massive formation, its historic significance, its grim romance, have all contributed to make it a symbol of Norwegian strength and antiquity. The king of Norway was known of old as "*Dovres drot*." In the patriotic poetry of the early nineteenth century Dovre occupied a large place. Borrowing an idea from a rather bombastic poem by Bishop Brun of Bergen, the members of the Constituent Assembly at Eidsvold, on May 17, 1814, clasped hands with the words which

have since become a Norwegian motto: "*Enige og tro til Dovre falder.*"

In spite of the thousand year old memories attached to the Dovre road, when the time came for building a railroad running north and south through the country, another and more easterly route was chosen. In the 'seventies the old narrow-gauge road was built through the mining city of Røraas and the valley of Österdalen to Trondhjem. One important reason why the easterly route was chosen was that the science of engineering had not yet developed to a point where a railroad across Dovre was considered within the limits of the practicable; but after the conquest of the still greater difficulties attending the construction of the Bergen railroad, Dovre held no terrors for Norwegian engineers, and they were quite ready to cope with this new task.

In 1908 the Storting decided that, instead of attempting to reconstruct the old track, an entirely new railroad should be built from Otta at the head of Gudbrandsdalen northward to Stören, a station on the old easterly route. From there on to Trondhjem the old narrow gauge track should be widened, so that trains could run from Christiania without change.

The beginning of the Dovre railroad proper is from Dombaas in the highest mountain region of Gudbrandsdalen. From there the yet unfinished Rauma railroad branches off and goes through Romsdalen to the sea. In the latest railroad plan for the whole country, the Dovre road constitutes a most important trunk line which is ultimately to be connected with lines running to the southernmost as well as to the northernmost point of Norway, sending lateral offshoots to unite it directly with the Bergen railroad and the western coast. Its importance from a national viewpoint can hardly be over-estimated.

The construction of the road consumed twelve years, and with the increased prices of war time cost 50,000,000 kroner—no small sum for a nation of two and a half million. Dr. Gade, president of Nordmandsforbundet, is authority for the statement that Norway has a greater length of railroad track per capita than even England; and when the nature of the territory is taken into consideration, it will be seen how tremendous is the effort that has been put forth. The Dovre railroad, in a total length of only 158 kilometers has tunnels aggregating 7 and a half kilometers. There are 87 bridges, the most important being the magnificent stone bridge that spans the Orkla, the largest bridge in the Norwegian railroad system. Although the snowfall is not so great as on the plateau traversed by the Bergen railroad, the wind sweeps with terrific forces over Dovre, and in order to guard the track from being buried in snow drifts, it has been necessary to elevate it from the ground, besides building snow-sheds and barriers.

The road was formally opened by King Haakon in September, 1921. When I passed over the ground in June, trains were running only to Dombaas. From the milder beauty of the Mjösen region, Gudbrandsdalen rose sterner and wilder as we traveled northward. The timber cabins, which looked like tiny doll's houses against the mighty upland slopes, were stung by wind and sun to an almost inky blackness on the exposed side. Dark forests fringed the light green, rushing waters of the Laagen. The new railway stations were built in a style to conform with the ancient peasant architecture, of upright timber, with a touch of color in the ornamentation, and each slightly different from its fellows. The rich Gudbrandsdalen blue, which we sometimes see in the doors of the mountain cabins, was used to good effect. As we got into the Dovre region, the style sometimes bordered on the bizarre.

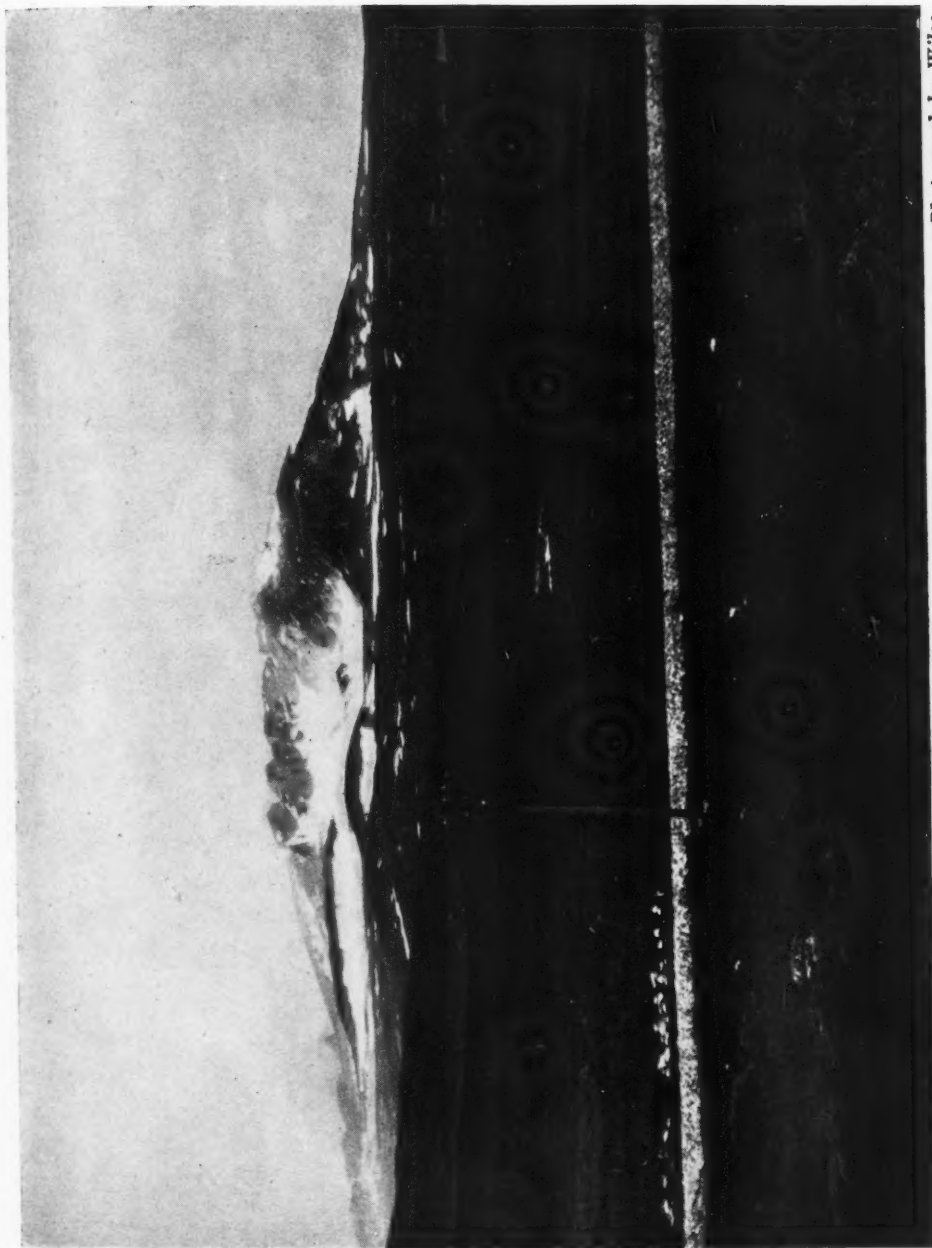
From Dombaas passengers and mail were conveyed by automobiles. The highway goes up a steep wooded incline, which the railroad is obliged to take in a long curve that has been dubbed the pigtail; but from the beginning of the plateau the road runs almost side by side with the railroad track. As we came up there I recalled another saying by Dr. Gade: "Norway is a flat country once you get on top of it." The roof of Norway stretched before us, broad and long. On the sides were turrets and pinnacles, to the west the alpine region capped by Snöhetta under its hood of eternal snow, to the east the lower rounded hills. Over it all was the faint golden and rosy shimmer of the Northern summer night. There was a constant shifting of color: boulders encrusted with gray lichen, patches of alpine flowers in deep red or yellow, luscious islands of light green moss. Lovely bits of landscape flashed upon the eye as the automobile dashed wildly ahead. (I afterwards learned that this leap over the roof of Norway, which we took in three hours, should have consumed four according to the schedule). Often there was a clear, cameo-like delicacy where one would have looked naturally for grim, forbidding severity and wild grandeur.

From the plateau of about 3,000 feet elevation the way goes through Drivdalen and Opdal to Stören and thence to Trondhjem. As we descend, the valley spreads out broad and mighty; we look down over a veritable sea of dark, pointed tree-tops. The mountain torrent at the bottom of the valley is beaten to white and yellow froth by the boulders; but after a while the river, too, spreads out, and soon it flows quietly between gently rounded, grassy hills. Big, solid farm-houses are surrounded by level fields. It is easy to imagine that this country with its air of space and wealth and amplitude should have been from antiquity the very heart and centre of Norway; easy, too, to realize that it fostered one of the strongest and proudest in the varied groups that constitute the Norwegian nation.

ember,
ning
gion,
ard.
the
inky
reen,
built
right
htly
n we
good
ered

auto-
the
the
most
illed
you
road
the
y, to
lden
con-
ches
reen
auto-
leap
ave
ear,
rim,

goes
em.
ook
tain
oth
and
olid
hat
uld
asy,
the



Photograph by Wilce

SNÖHETTA

"To the
west the alpine
region
capped by
Snöhetta
under its
hood of
eternal
snows"



DRIVEDALEN

"The mountain
torrent
at the bottom
of the valley
is beaten
to white
and yellow
froth by the
boulders"



DAIVDALEN
WITH THE OLD
"VAABSTIGEN"

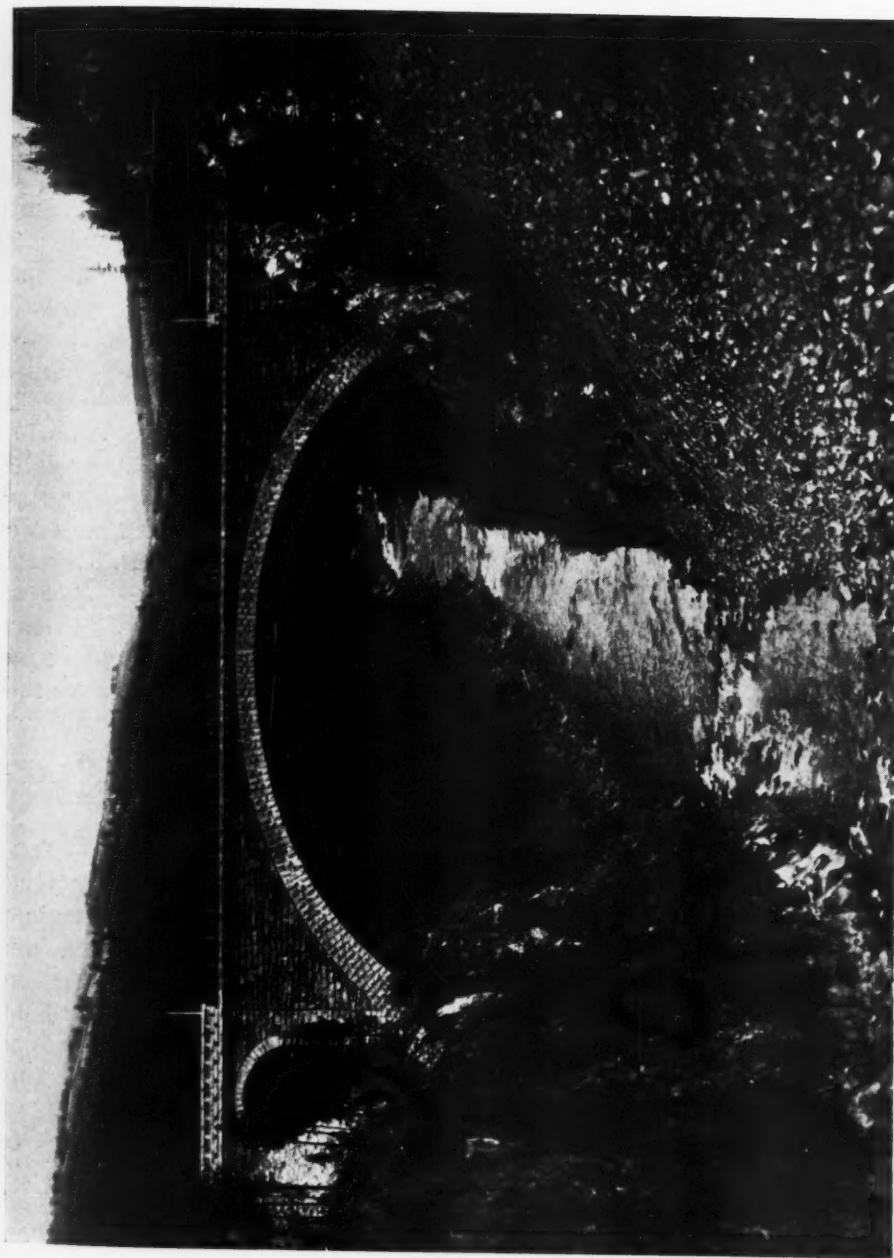
"The valley
spreads out
broad and
mighty"

DRIVEDALEN
TOWARD
NYSTRUP

"We look
down
over a
veritable
sea of
dark, pointed
tree-tops"



Photograph by Wille



ORKLA BRIDGE

"The magnificent stone bridge that spans the Orkla, the largest bridge in the Norwegian railroad system."

A Botanist in Jotunheimen

By JOHN W. HARSHBERGER

Norway has four districts where snow mountains are found. The first is the plateau known as Hardangervidden with the alpine summits around Finse on the Bergen railroad. The second is along the north side of the Sognefjord, while the third, known as Jotunheimen is at the head of that fjord. The fourth is the Dovre plateau from which rise snowy peaks.

The writer, an American botanist anxious to know the flora of the fjelds, selected Jotunheimen as most likely to meet his requirements, but in order to become familiar with the country as a whole, he decided to make the approach by a roundabout route. The first part of the journey was from Christiania to Bergen by rail. The elevated plateau around Finse undoubtedly provides good botanizing ground, which has been thoroughly investigated by Dr. Gunnar Samuelson of Uppsala. A superficial examination of the vegetation around the station during the half hour the train stopped showed the most conspicuous plants to be dwarf bilberry (*Vaccinium myrtillus*), common juniper (*Juniperus communis*) and, distributed generally but in isolated clumps, a number of willows with gray foliage. Underneath these willow-bushes mats of mosses are found, but no alpine flowers; these must be looked for between the dwarf shrubs and in the stony interspaces. The vegetation units comprise heathland, alpine meadows, high moors, and fjeld.

To reach Jotunheimen, the route was retraced by railroad from Bergen to Voss, then to Stalheim by automobile, by boat from Gud-

vangen around the Sognefjord to Skjolden, and then by pony to Fortun, where the real ascent began. A steep cart road zigzagged to the hanging valley above. The hay on the farmland had been cut on the day of the botanist's arrival, August 8, and the farmers were busy carrying it to the barns in one-horse wagons with the usual racks to prevent the hay from slipping off. Clumps of blue



NORWEGIAN CART WITH PONY AND DRIVER, SKJOLDEN
TO FORTUN



BOG WITH PILE OF REINDEER BONES AND ANTLERS SURROUNDED WITH COTTON-GRASS
AT TURTEGRÖ

monk's-hood (*Aconitum septentrionalis*) in full flower formed patches of color along the mountain trail. As this plant is poisonous to stock, it has survived the browsing propensities of the Norwegian cattle, and has become quite abundant. Above the farmland, alder thickets covered the steep hill slopes, and here the operation of cutting the alder and binding it in bundles for winter browse was illustrated, as the farmer hangs the bundles on the smaller trees to dry before stacking them in the barnyard, perhaps a mile distant. The dry alder twigs form an important food for the cattle during the winter months, when the mountain pastures are deep in snow.

As we reached the head of the valley, at an elevation of 3,000 feet, the last birch trees were left behind. An amphitheatre of mountains spread out before us with a picturesque waterfall on the upper side. Here the trail wound around till it reached Turtegrö, so named from the turt plant (*Mulgedium alpinum*). It is the gateway to Jotunheimen on the Sognefjorden side, and there in a comfortable hotel with room for fifty guests, one may prepare for the arduous trip by sound sleep in the pure mountain air. Below the hotel is a bog with plenty of cotton-grass (*Eriophorum vaginatum*) and in one place, where a pile of reindeer bones and antlers had accumulated from the slaughter of several winters, the sedge was especially luxuriant. Here the bakeberry (*Rubus chamæmorus*) gave the writer his first abun-



CUSHION OF MOSS PINK AMONG ROCKS ON THE SOGNEFJELD

dant meal of this luscious fruit used so much by Norwegians. Thickets of dwarf birch and common juniper dotted the slopes. The bog in some parts was being exploited for its deposits of peat, and the trenches with rows of blocks piled up for drying in the air gave an inkling of the extent to which the mountaineer depends on peat for his winter fuel.

From Turtegrö the start was made into the real Jotunheimen, that wilderness of grim peaks, forbidding bogs, and glittering snow-fields, which in its very names, Galdhøpig, Glittertind, Memuntinder, Fanaraaken, Gokkeraxlen, Trolldsteinhöier, Skagastölstind, carries a suggestion of hoary eld. The object of the trip was to collect fjeld plants and take photographs of the vegetation, and the way led across the Sognefjeld or Dölefjeld, as it is frequently called, to Krossbu. A guide, a Norwegian named Ole Birge, was secured to carry the rüch sack.

August ninth promised to be clear and cloudless, and so it proved, affording ideal conditions for travel and photography. After leaving the hotel at Turtegrö there was a sharp ascent to reach the rocky plateau of the Sognefjeld, and, although the path went up and down, the essential character of a plateau was maintained. At an elevation of 4,000 feet is a cairn raised in memory of the visit of King Oscar II to the spot. The region was covered with protruding granite rocks and boulders. Alpine plants filled the crevices and flat stony places between the larger rock masses which were gray with crustaceous lichens. The



GROUND UNCOVERED BY MELTING OF SNOW PATCH SHOWS GROWTH OF ALPINE WILLOW AND BUTTERCUPS, SOGNEFJELD

larger plants of the Sognefjeld proved to be low shrubby specimens of the dwarf birch (*Betula nana*), juniper (*Juniperus communis*), bilberry (*Vaccinium myrtillus*) with hoary willows in abundance. Here were cushions of moss pink (*Silene acaulis*) with fully opened pink flowers, thousands of roseroot (*Sedum Rhodiola*), which in Pennsylvania, where it is a glacial relict, is a rare and local species. We passed areas bright with yellow and orange flowers of *Saxifraga aizoides* and yellow buttercup (*Ranunculus auricomus*). *Sibbaldia procumbens*, a plant almost extinct on Mount Washington, New Hampshire, here grows plentifully, as also the ubiquitous alpine lady's-mantle (*Alchemilla alpina*).

At an elevation of 4,300 feet the first snow fields were encountered, and the trail was often covered with larger and smaller patches, but wherever the snow had recently melted, snow patch species of plant-life were found in abundance, such as the *Salix herbacea*, which covered the wet ground as a green carpet, and *Ranunculus glacialis* with its white or purplish-white flowers. Larger and smaller mountain tarns fed by snow water were frequently passed, but these lakes are without the usual water plants, because the climate is too severe for their growth.

At the highest elevation which the road reached, 4,900 feet, a wonderful view of the snow mountains presented itself. Here is the

Fanaraaken range with living glaciers feeding large alpine lakes, the source of several important mountain streams. Beyond lies Smörstabben with its glaciers, névé, and icy peaks reflecting the noonday sun. Glacial lakes, some of them covered with ice, nestle in the mountain basins. Yet the southern slopes were bright with flowers of alpine plants forced into activity by the warmth of the air and soil. Insects were flitting from flower to flower to plunder the pollen and nectar, while an occasional butterfly hovered in mid-air over some bright patch of blossoms.

As the afternoon advanced, clouds began to gather in the clear sky, warning the botanist not to linger too long in the contemplation of nature's lovely flower garden with the glorious mountains beyond, and after Krossbu was reached, the storm which had been brewing broke in cold, driving rain. In the morning the proprietor of the hotel insisted on greasing the botanist's boots, for he said the trail would be very wet after the storm. The botanist first refused to have the hotel-keeper do this menial task, but there flashed through his mind the oriental custom of washing the feet which was considered an act of courtesy to the foot-sore traveller, and with this in mind he consented. The trail was indeed wet and slippery, and Nils Bakkeberg's courtesy was appreciated before many miles had been covered on the way to the next stopping-place, Bövertunsæter.

A wagon road is being constructed to the head of Böverdalen and will eventually be extended across the Sognefjeld. The partly improved road follows the left shore of the Bövertunvand and the right bank of Bövertjern to the pass leading over into Leirdal, whence it descends through a primeval pine and spruce forest to Elvesæter. Here the strenuous part of the journey virtually ends, for it is possible to take an automobile to Otta, a station on the Dovre railroad. The topography and vegetation is repeated in the plateau and mountains of the Dovre region through which the train passes on its way to the bright, northern city of Trondhjem. There the American may linger and enjoy a fine summer climate of the seashore at 63° 30' North Latitude.

The Cruise of the Dana

The Mysteries of the Eel Revealed by Science

By Å. VEDEL-TÅNING

Denmark's position in the midst of encircling waters and her possession of colonies in the far North have naturally resulted in leading Danish expeditions for scientific research toward two domains: that of the sea and that of the Arctic regions. In both fields her sons have won renown. To illustrate the amount of effort constantly being put forth in this work it is only necessary to mention that the past year alone has witnessed expeditions sent forth to Arctic Canada and Greenland, to the tropical-subtropical Atlantic, and to East Indian waters.

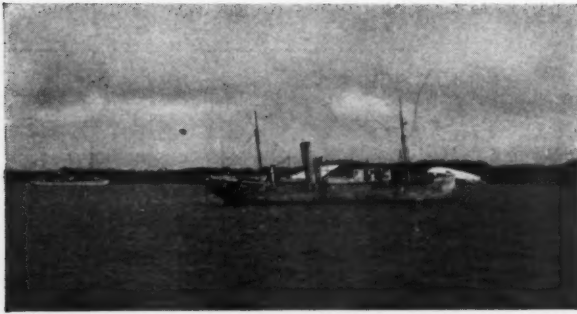
The present article will deal only with the marine-biological investigations carried on by the expedition of the *Dana* under the leadership of Dr. Johannes Schmidt, director of the Physiological Department of the Carlsberg Laboratory. The undertaking was under the patronage of His Royal Highness Prince Valdemar of Denmark.



JOHANNES SCHMIDT, PH.D., LEADER
OF THE "DANA" EXPEDITION

The mysteries of the common eel have led Danish ocean-biological investigations ever deeper into the Atlantic Ocean. With the object of discovering the home of the eel in its youngest stages, various Danish trading ships and the schooner *Margrethe* have made fishing experiments extending over a number of years and covering the entire northern part of the Atlantic. In 1920 and 1921 a motor schooner especially equipped for deep-sea investigations, the property of the East Asiatic Company—whose director, His Excellency H. N. Andersen, showed much interest in the undertaking—fished in all those parts of the ocean which were supposed to be spawning-places of the eel. Using all this preliminary work as a basis, the *Dana* expedition conducted its investigations, the trip lasting from August 30, 1921, to July 11, 1922.

The *Dana* is a 325-ton steam trawler of English construction. It is only 140 feet long, but the little craft is especially equipped for making biological and hydrographical investigations of the open masses

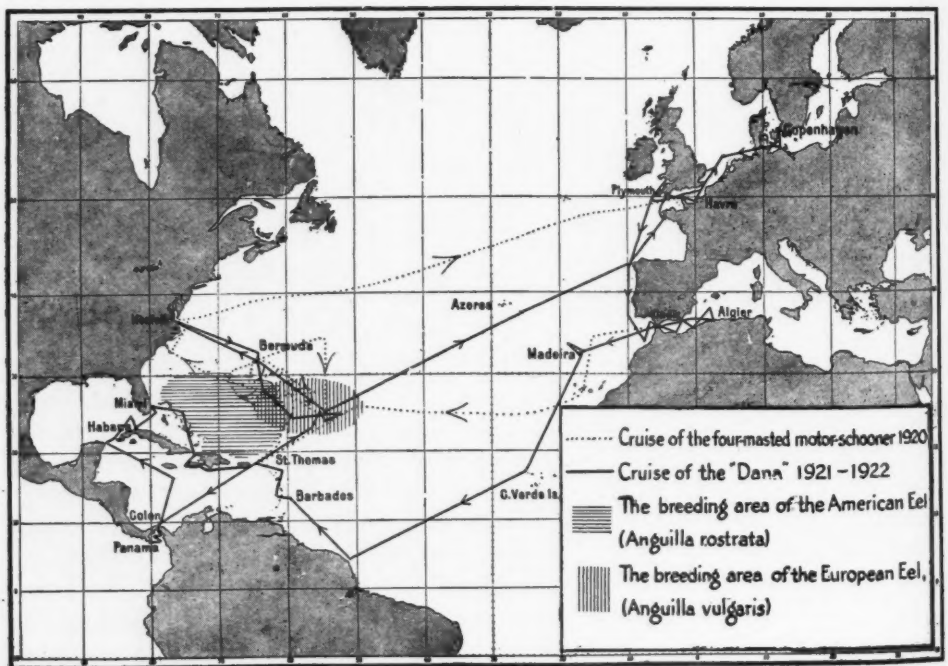


THE "DANA" IN THE PORT OF ST. GEORGES, BERMUDA

of water in the Atlantic — investigations that may extend from the easily accessible waters of the surface to the deeps four thousand fathoms below the level churned by merchant vessels and ocean liners. In constructing the winches with their many thousand feet of steel

wire, the fishing tackle, hydrographical apparatus, laboratories, etc., all the experiences gathered by previous expeditions during the last fifty years were utilized, including deep-sea expeditions from England (the *Challenger* Expedition), from the United States (the *Blake* and the *Albatross*), from France and Germany (the *Valdivia*), from Norway (the *Michael Sars*), and from Monaco, the last named under the command of the late Prince Albert of Monaco, who was so great a patron of oceanography.

The high development of deep-sea investigation technique in our day justified the hope that the *Dana* was the exemplification of the most nearly perfect type of ship for studying the free masses of water



THE ROUTE OF THE "DANA"

in the ocean, and this hope was fully realized. On its trip circling the Atlantic—a trip greater in length than the distance around the earth at the equator—the *Dana* expedition succeeded in collecting a very rich material to elucidate the hydrography of the North Atlantic Ocean, the salinity and oxygen content of the water, its temperature, currents, etc., and also the teeming plant and animal life in its waters, from the sunny surfaces to the great depths where no sun can penetrate. Many special problems presented themselves for solution, among others the movements of the tides in the Straits of Gibraltar; and during the first part of 1922 the expedition had the opportunity of spending some time in the Pacific, off Panama, where biological and hydrographical research yielded astonishing and interesting results.

A large part of the time of the expedition was devoted to studying the eel, the work being carried on first along the western coast of Europe, then in the centre of the ocean in the Sargasso Sea, then along the eastern coast of America and finally along a route straight across the Atlantic back to Europe. In this way the life story of this useful and important fish was uncovered.

From the very earliest times the propagation of the eel has been shrouded in mystery. Aristotle claimed that the mire of fresh and salt water was the medium from which the eel was created. For many centuries this or other strange theories as to its origin—from May dew, for instance—held sway. Aristotle was an authority not to be lightly ignored, yet the theory of "self-generation" finally received its death-blow. It was then supposed that the eel gave birth to its young in the form of tiny elvers.

Though the American naturalist Th. Gill, many years ago, advanced the theory that the small, pellucid, highly compressed fishes in the ocean described under the name *leptocephalus* were the young of various species of eel-fishes at different stages, it is hardly thirty years ago that the problem of the propagation of the eel has become the object of closer study.

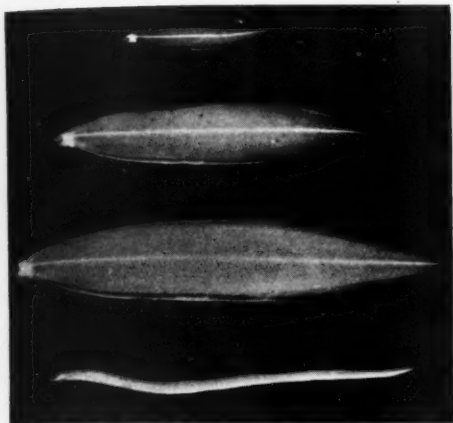
Two Italians, Grassi and Calandruccio, proved in 1896 that the strange little crystalline, leaf-like *leptocephalus brevirostis* was no independent species, as had hitherto been supposed, but were the larvae of the eel. These larvae were found in salt water and had been seen only in the Mediterranean prior to 1904, when Dr. Johannes Schmidt, leader of the *Dana* expedition, found the first specimens in the open waters of the Atlantic west of the Faroe Islands. With this discovery the scope of the problem was fixed, and now, after twenty years of research, mainly carried on by Dr. Schmidt with the financial aid of the Danish government and the Carlsberg fund, besides private generosity, the solution has been reached, and is seen to be far more strange than the fabulous myths to which the unsolved problem gave rise.

Thousands and thousands of samples drawn from a region embracing the entire northern part of the Atlantic Ocean have been closely examined, and by these extensive studies it has been possible to prove that a comparatively small place in the warmest and deepest parts of the open waters of the Atlantic southeast of Bermuda is the hatching ground for the eggs of all European eels. These eggs are spawned by full-grown eels which, after having remained from five to fifteen years in fresh waters or in salt coastal waters, follow the call that entices so many of the creatures of our globe on distant journeyings. Just as birds of passage take their annual flight thousands and thousands of miles through the air to find a nesting-place where they can hatch their young, so the full-grown eel starts on its wanderings, but only once in its lifetime. From regions as far apart as northern Norway and the Nile it comes through inland seas and across the oceans to find a place to spawn.

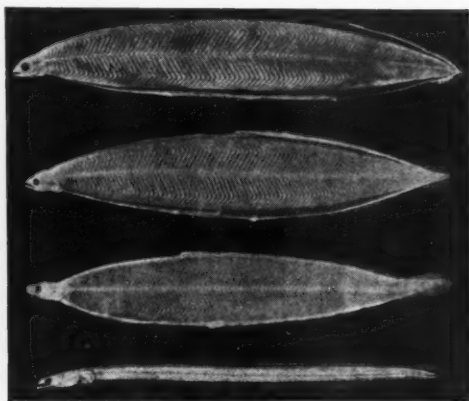
From this spawning-place in the western part of the ocean the mighty masses of water in the Gulf Stream carry the tiny eel larvae, which at first are only a couple of millimeters long, over to Europe. Gradually, as they increase in size, they gain independence of locomotion, and when, after about two years have elapsed, they find themselves in the summer and autumn near the coastal banks west of Europe and in the waters of the Mediterranean, the larvae, which by this time have become seven or eight centimeters long, are changed into the round, very agile elvers found by thousands in European waters the following spring and summer. These elvers are about three years old when they make their way up the rivers.

The question naturally occurs whether the American eel follows the same course. The two species resemble each other so nearly that only a very close investigation reveals a difference—the European eel having about 114 vertebrae in its spinal column, the American about 107—yet Dr. Schmidt has succeeded in finding a very important biological distinction between them.

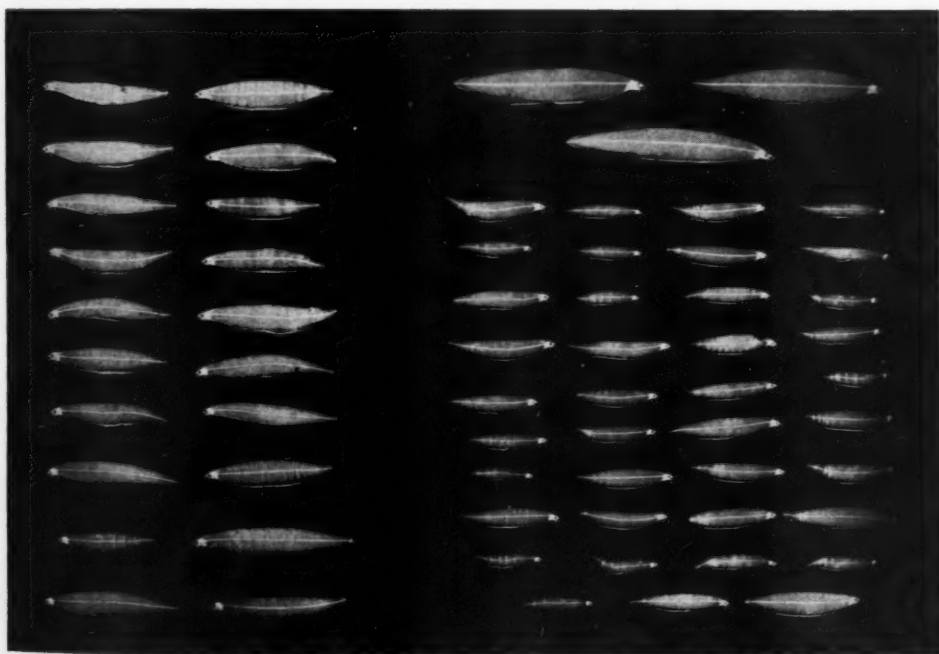
The American eel, like its European cousin, spawns in a small section of the warm, deep Sargasso Sea, though for the most part a little farther west, and a couple of months earlier in the year, as early as January and February. It has long been an unanswered riddle why one of these species went only as far as North America, the other all the way across the Atlantic to Europe. Both are found in large quantities as larvae close to the American coast. The key to their different distribution has now been found through observations of the conditions of their life noted by Dr. Schmidt. It has been found that the American eel lives only a year as larva, while the European spends more than two years in that state. Both are swept along with the masses of water in the Gulf Stream; but after one year in the sea the larvae of the American eel are ready to undergo the transition to



The European Eel, the top specimen being about three months old, the second about one year, the third (the full grown larva slightly below natural size) about two years, and the Elver, about three



Metamorphosis of the American eel. The top specimen is a full grown larva before metamorphosis, about one year old, natural size. The lower is an elver reduced to a little over a third of its natural size



Eel larvae from one haul in the Sargasso Sea. The specimens to the left are the American eel (about six months old). Those to the right the European eel (three specimens about one year old, the remainder about three months). A little over half natural size

the elver stage. At that time they are close to the American shore, and when the metamorphosis is completed, they seek the bays and

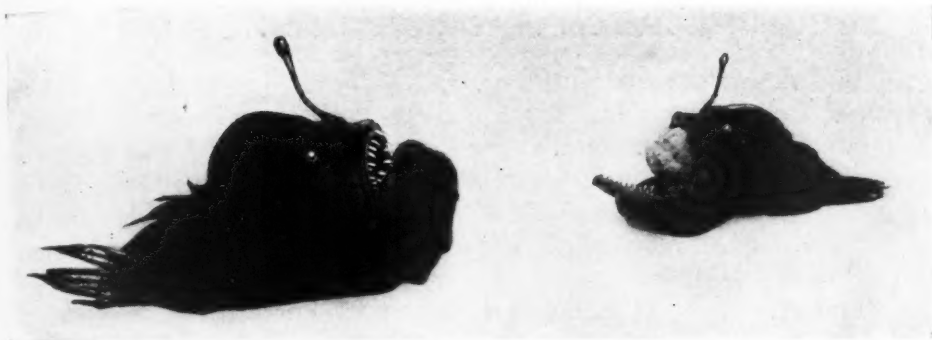
river mouths along the coast. The European eel, however, still has to undergo many months of existence as larva, and during this time it is being carried, partly by the current and partly by its own active movements, toward its destination on European shores.

We know that the salmon of the Pacific, after wandering the immense distance from the sea to the small fresh water streams of Alaska, spawns and produces the enormous quantities of eggs necessary for ensuring the life of the species, and then dies. We may believe that, in similar fashion, the eel, after journeying so far to its wedding, spawns millions of eggs in the warm, deep waters of the Sargasso Sea, and then dies and becomes food for the carrion-eaters of the ocean.

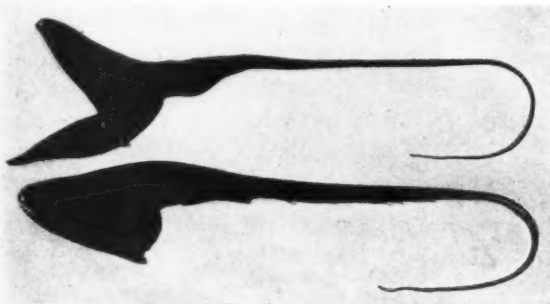
The researches regarding the eel constitute only one of the biological investigations undertaken by the *Dana* expedition. Work was, of course, done in many other domains, but to describe these in detail would fall outside the scope of this article. Yet to give the reader some slight idea of the countless bizarre forms that life assumes in the deeps, as they were daily revealed in the creatures brought to the surface in our nets, a few pictures are reproduced. These represent only a single animal group—fish from a depth of one to two thousand fathoms.

Fish from great depths are nearly always black as ink or at least very dark; while on the other hand shrimps from corresponding depths are usually blood red. Many deep-sea fishes are provided with numerous luminous organs, often arranged in series along the sides and lower part of the fish. If the fish is alive when caught and is quickly placed in an aquarium, the bluish-yellow light emanating from these many small organs is readily perceptible, producing an effect in miniature like the brightly lit port-holes of an ocean liner. In the depths, where no movement of the waves is found, and where the various organisms are subjected to a minimum of mechanical influence, fantastic forms develop. Some have very long thin appendages. One of the photographs shows a deep sea fish with a monstrously long filament on its nose terminating in a luminous bulb; another shows a fish whose caudal fin extends into a very long filament. Most of them are soft and of a gelatinous consistency, not firm like the fish on the coasts. One characteristic of many deep-sea fish is a huge mouth; for deep down in the dark, where prey is not so common as along the coastal banks, it is often necessary to take advantage of an opportunity and consume enough food to last a long time.

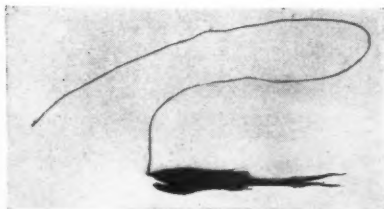
The above sketch has shown how work pursued patiently for many years has resulted in the unravelling of one of the knottiest problems in the life history of the animal kingdom. It will be seen too that the masses of water in the North Atlantic and the life in them have been subjected to a much more careful investigation than



Deep sea fish ceratias, black with a luminous bulb at the end of its nasal filament and with an enormous mouth. In the specimen to the right the stomach is visible, squeezed out by internal pressure when the fish was hauled up from a depth of 1,500 fathoms. Size, nine inches

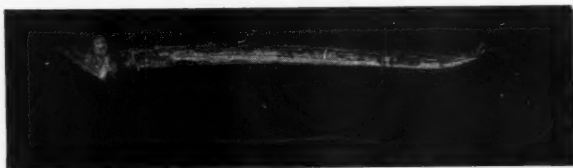


Two views of the deep sea fish macropharynx with an enormous mouth, open in the upper figure, closed in the lower. The tiny eye is at the very tip of the nose. This fish is about twenty inches long



Deep sea fish Stylophorus with telescopic eyes, a very small mouth, and an odd profile. The caudal fin is elongated, forming an appendage fourteen inches long

The various bizarre fishes pictured here are from a depth of between one and two thousand fathoms



Deep sea fish with a luminous bulb at the end of its long nasal filament. Like many other fish caught on this expedition, this fish has never been seen before and has not yet received a name. It is five inches long, the nasal filament fourteen inches

those of any other ocean. The moving spirit of the work has been and is Dr. Johannes Schmidt, the leader of the *Dana* expedition, who since 1910 has been the director of the Physiological Department in the Carlsberg Laboratory and since 1909 director of the Danish Committee for the Study of the Sea.

Swedish Church Architecture in America

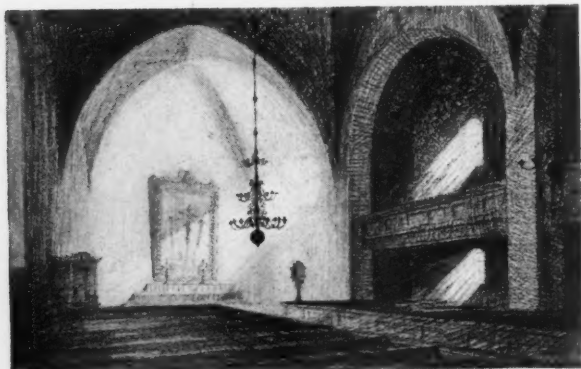
The new Swedish Lutheran church, which is to be erected at Astoria, Long Island, and for which funds are now being raised, will be a novelty in church architecture in America in that it expresses the peculiar style of the smaller churches in Sweden. The architect, Birger Hammarén, himself a graduate of the Royal Institute of Technology in Stockholm, has successfully achieved a fresh yet faithful treatment of the traditional motifs.

The general form of the new church is shown in the accompanying picture. The coloring will be a play of tile red and stucco white.



The edifice will be set well back from the street, an arcade leading up to the main door. There will be a sunken garden four feet below the street level with the traditional features of a baptismal font and an outdoor pulpit. On the same level as the garden is the assembly room of the Sunday school, and above this is the church proper. The pipe organ is to be placed in the tower, so that the music may be heard in the streets as well as in the church.

The initiative toward the erection of this Swedish church on American soil has been taken by the pastor of the congregation at Astoria, the Reverend Ragnar Byrenius. It is planned to begin construction in March and to have the building ready so that it can be dedicated by the Archbishop of Sweden, Dr. Nathan Söderblom, whose long-planned visit to America is expected to take place in the coming autumn. The total cost is estimated at \$80,000.



PLANS FOR THE NEW CHURCH AT ASTORIA. **BIRGER HAMMARÉN, ARCHITECT**

Current Events

U. S. A.

¶ French occupation of the Ruhr continues to interest Washington to the exclusion of other international affairs. The return of the American troops from the Rhineland is said by administration officials to be independent of whatever differences exist between France and Germany over the reparations issue. ¶ Senator Borah's plan for an economic conference to aid the European nations through American co-operation is once more looked upon as a possibility in spite of Secretary Hughes' declaration that the administration is conducting investigations along that line. ¶ President Harding appointed E. R. Crissinger, formerly Controller of the Currency, to be Governor of the Federal Reserve Board, his object being to place the agricultural element more directly in touch with the banking interests of the country. ¶ According to Secretary Hughes, the reparations plans of Roland W. Boyden, American observer attached to the Reparations Commission, has no further official bearing than that it was prepared at the request of the members of the Commission. A sensation was created when Mr. Boyden stated that Germany could not possibly fulfill the demands of the Treaty of Versailles. ¶ President Harding notified the Senate that Great Britain, Japan, and China have ratified the treaties which they entered into at the Washington Disarmament Conference. ¶ Ecclesiastical circles were stirred because of a sermon by Dr. Percy Stickney Grant, rector of the Church of the Ascension of New York, in which he attacked the doctrines of the Church as not in consonance with modern ideas. As a result it has come to an issue between Dr. Grant and Bishop Manning, of the New York diocese. ¶ A movement is under way among industrial leaders to have the immigration law changed to admit more immigrants of the type needed at the present time in many large manufacturing establishments. ¶ Capital and labor are gradually drawing together, in the opinion of financial commentators who consider it a good sign that the Brotherhood of Locomotive Engineers, through Warren S. Stone, its head, has become associated with the Empire Trust Company as a stockholder. Mr. Stone has been placed on the directorate. ¶ An unqualified artistic success was attained here by the Moscow Art Theatre whose performances were acclaimed as setting a standard for American actors. It is stated on no less authority than that of Otto H. Kahn, chairman of the board of directors of the Metropolitan Opera Company, that Morris Gest, who brought the Moscow company to this country, is planning a great art theatre in New York devoted wholly to encourage American opera, drama, and music.

Sweden

¶ With traditional formality the first meeting of the Riksdag for 1923 took place on Thursday, January 11. As customary, the King referred from the throne to a number of bills to be introduced in the Riksdag; and from his remarks it was surmised that the present temporary law governing working hours will be revised to lengthen the working day. ¶ It is not likely that any questions of greater moment will come up for decision before this Riksdag. Neither the matter of defense regulations nor the proposed changes in school instruction, with the elementary schools as a basis, are thought sufficiently developed for consideration during the present year. ¶ The State budget changes, inaugurated last year and covering the period from July 1 to June 30 rather than the calendar year, have been completed now that the present Riksdag has sanctioned the budget bill. The total budget amounts to 737,000,000 kronor which is about 200,000,000 kronor less than the budget for 1922. This budget was drawn on lines of strict economy and the Minister of Finance deplores that drastic restrictions were necessary. Almost 4,000,000 kronor are saved by doing away with certain committees, and the Minister of Finance indicates that a further reduction in the number of State employees is imminent. It is not likely that an increase in taxation will be necessary. ¶ The turnover of the Stockholm stock exchange in 1922 amounted to 195,000,000 kronor as against 162,000,000 kronor in 1921. At the close of the year all the securities showed higher values than the lowest quotation during the year, and some were even higher than at the close of the preceding year. On the whole the average value of stocks and bonds declined 9 per cent during the year, but considering that money had a still higher value the indication is that an improvement is coming. ¶ The municipal elections for representatives in all cities outside Stockholm, which took place in December, show that the Right party leads with a majority in twenty cities, while the Social Democrats obtained the majority in nine cities. The latter, together with the extremists, that is the Communists and the Left Socialists, are in a majority in seven other cities, while in five cities they control half of the seats. In the remaining places the two leading parties together control the majority of the seats. All together the figures are as follows: 1,392 Conservatives (Right); 634 Liberals (Left); 1,168 Social Democrats; 37 Left Socialists; 134 Communists. Twenty-five members elected were outside all of the regular parties. ¶ Ira Nelson Morris, on leaving his post as United States Minister to Sweden, was the recipient of high praise in the press which dwelt on his splendid qualifications and the importance of the sympathetic understanding won for himself and his country during his ten years service at Stockholm.

Denmark

¶ Denmark's new law governing minority age and trusteeship, and that governing marriage and divorce became effective respectively on October 1, 1922, and with the beginning of the present year. With regard to the minority age the law decrees that any one past twenty-one years is of age, and any one under that a minor. Formerly it was necessary for persons of either sex to be 25 years old before they could dispose of their own possessions, while what was called a personal coming of age took place at the age of eighteen. With the new law Denmark has the same arrangement as nearly all European countries.

¶ The law touching marriage and divorce is in close relation to the minority law. In addition there is what Denmark's legislation has not heretofore known, namely, rules with regard to the contracting parties as relating to the period of engagement, and compensation in case the engagement is dissolved. ¶ In former years the minimum age when a person could marry was for a man 20 years and for a woman 16 years. The new law increases the minimum age respectively to 21 and 18 years. Even then a woman cannot contract marriage without the consent of parents or guardian before she has reached 21 years.

¶ A new clause in the law is that which demands that the contracting parties must produce proper papers to the effect that neither is suffering from contagious or dangerous diseases. Another clause allows a free choice of church or civil wedding ceremony. The regulations governing divorce are also changed in several respects. ¶ The proposed new legislation presented by the Minister of the Interior with regard to the administration of Greenland has met with considerable protest in certain Norwegian circles where exception is taken to Danish sovereignty in its entirety. It is believed, however, that the matter will be adjusted satisfactorily between the two countries. The main issue seems to be that of continued rights for Norwegians to fish along the east coast of Greenland. ¶ From a review of the situation at the new year it is believed that the financial crises cost Denmark 230,000,000 kroner last year, of which amount 170,000,000 kroner is charged up to the Landmandsbank, 50,000,000 kroner to the Revisions and Discountobank, and 22,000,000 kroner to provincial banks. ¶ It is publicly announced that members of the royal family have also suffered severely from the collapses in the financial, commercial, and industrial world. This is said to be the reason why Prince Valdemar has given up his modest household in the Yellow Palace in Copenhagen and has started on an extended tour to the far East. His oldest son, Prince Aage, has entered the French service as an officer of the army in Africa, and the youngest son, Prince Erik, it is said went to Canada to engage in the dairy industry there. ¶ Denmark started the new year with 56,000 unemployed, while a year before the number stood at 78,000.

Norway

¶ The new session of the Storting was formally opened by King Haakon on January 9. In his speech from the throne the King emphasized the necessity of cutting down expenses in order to balance the budget. He announced that the Government would invite the Storting to prolong the temporary Law on Compulsory Arbitration in Labor Disputes and expressed his satisfaction with the decrease of unemployment, the number of totally unemployed persons at the end of 1922 being 30 percent less than a year ago. ¶ Referring to the Greenland question the King could only make the negative announcement that the question has not been brought nearer to a solution. On December 22 the Norwegian government notified the Danish government that Norway made strong reservations with regard to the new Danish Bill on the Administration of Greenland, as far as the bill concerns territory where Danish sovereignty was not claimed before the Danish decree of July, 1921. This decree which extended the Danish sovereignty over the whole area of Greenland has not been recognized by Norway, the Norwegian government upholding the rights which Norwegian whalers and sealers have enjoyed for centuries in the eastern part of Greenland. Mr. Johan Castberg, former Minister of Justice, has suggested that the question should be referred to the League of Nations for arbitration, and several papers are supporting this idea. ¶ Another arctic question mentioned by the King was the Norwegian sovereignty over Spitsbergen. Holland has objected to some of the provisions in the Norwegian draught of a mining bill for Spitsbergen. After negotiations between the Norwegian and the Dutch governments the bill has been amended to meet the Dutch objections. When the mining bill has been definitely approved by all the signatory powers, the bill and the Spitsbergen treaty will both be submitted to the Storting for ratification. ¶ The government estimates for the next financial year amount to 546 million Norwegian kroner which is 76 million less than the last estimates. The total debt of the Norwegian State increased by 161 millions during the last year and at present amounts to 1,401 millions. ¶ The National Congress of the Norwegian Prohibition party was opened at Kristiania on January 5. The resolution passed by the Congress demands strict application of the Prohibition Law and expresses strong disapproval of the concessions made by Norway to France and Spain in the commercial treaties concluded with these two countries. ¶ The National Executive of the Norwegian Communist Labor Party, after a heated discussion lasting several days, on January 8 decided to recommend the party to retain its connection with the Third Internationale, Karl Radek, as representative of the Moscow Executive, having declared that Moscow would respect the independence of the Norwegian party.

The American-Scandinavian Foundation

For better intellectual relations between the American and Scandinavian peoples, by means of an exchange of students, publications, and a Bureau of Information—

Officers: President, Hamilton Holt; Vice Presidents, John G. Bergquist, John A. Gade and C. S. Peterson; Treasurer, H. Esk. Möller; Secretary, James Creese; Literary Secretary, Hanna Astrup Larsen; Counsel, Henry E. Almberg; Auditors, David Elder & Co.

Government Advisory Committees: *Danish*—A. P. Weis, Chief of the Department of the Ministry of Education, Chairman; *Norwegian*—K. J. Hougen, Chief of the Department of Church and Education, Chairman. The Swedish Government is represented in the Swedish American Foundation (below).

Co-operating Bodies: *Sweden*—Sverige-Amerika Stiftelsen, Malm Morgsgatan 5, Stockholm, Svante Arrhenius, President; E. E. Ekstrand, Secretary; Eva Fröberg, Associate Secretary; *Denmark*—Danmarks Amerikanske Selskab, M. I. T. C. Clan, President; N. Feilberg, Secretary, Stjerneborg Allee 8; *Norway*—Norge-Amerika Fondet, Lille Strandgade 1, Christiania, K. J. Hougen, Chairman; Sigurd Folkestad, Secretary.

THE ANNUAL MEETING OF THE TRUSTEES

At the annual meeting of the Trustees of the Foundation, February 3, the following officers of the Foundation were elected for 1923: President, Hamilton Holt; Vice Presidents, John G. Bergquist, John A. Gade, Charles S. Peterson; Treasurer, H. Esk. Möller; Secretary, James Creese; Literary Secretary, Hanna Astrup Larsen; Counsel, Henry E. Almberg; Auditors, David Elder & Company.

The report of the President and Secretary and the Auditors' report were ordered printed and distributed, the former reviewing the various activities of the year 1922, the latter showing that the full program of the Foundation has been maintained during the year without drawing upon the capital fund and without deficit. The Endowment Committee again proposed a campaign for funds for a Foundation Building.

THE NEW YORK CHAPTER

The Annual meeting of the New York Chapter of Associates was held in the Assembly Room of the French Institute on January 15. A portrait of Niels Poulson, loaned by the Hecla Iron Works, a symbolic model from the hand of Einar Jonsson—Thorfinn Karlsefni and his wife holding their son against the half sphere of America—and the American, Danish, Norwegian, and Swedish flags made the room seem, for one evening, the natural forum of the Chapter. Officers proposed by the Nominating Committee were elected for 1923: President, Henry Goddard Leach; Vice President, C. Gunnar Molin; Secretary, H. Sundby-Hansen; Treasurer Harold W. Rambusch.

Baroness Dahlerup was re-elected Chairman of the Social Committee. The report of the retiring Secretary, Albert Van Sand, shows that on December 31, 1922, the New York Chapter had 1156 members, of whom 111 were new members enrolled by the Membership Committee during the year. Among the guests of the Chapter at this meeting were Consul-General Langkjaer, Consul-General Lamm, Professor Theodor Svedberg of Uppsala University, Mr. Thorvald Mikkelsen of Copenhagen, and Mr. Hamilton Holt, President of the Foundation.

THE JUNIOR LEAGUE

The Junior League of the New York Chapter celebrated its first birthday by meeting for the election of officers and consideration of reports at the home of Mr. Henry G. Leach, on January 10. The League completed the year with a balance of \$233.25, representing the proceeds of pleasure. The treasurer, Miss Ellen Stilling, was re-elected after presenting her report. Mr. Frank E. Bagger was elected president to succeed Miss Margaret Drewsen who has withdrawn to become a member of the California Chapter; Miss Elisa Andersen was chosen vice-president, and Miss Hedvig Eskesen, secretary.

THE STIFTELSE'S SECRETARY IN RUSSIA

At the November meeting of the Sverige-Amerika Stiftelse, Mr. Ekstrand lectured on Swedish aid to Russia and Present-Day Russia. Mr. Ekstrand has been in charge of relief work supported by one-half million kronor from the Swedish Red Cross and one million from the Government. His field has

been the Russia that was once the "wheat-larder of the world," but to-day has not harvest enough for seed.

UNIQUE HONOR FOR DR. EGAN

At the Danish Legation in Washington on January 16, Dr. Maurice Francis Egan, for ten years American Minister to Denmark, received from the hands of Minister Brun the gold Medal of Merit recently bestowed upon him by King Christian X. It is said that this distinction, rare even in Denmark, has never before been conferred upon an American.

MINISTER MORRIS RESIGNS

It was announced early in January that Ira Nelson Morris, American Minister to Sweden since 1914, had resigned his post at Stockholm to resume direction of his business interests. Minister Morris, during his eight years in Sweden, has had to deal with many difficult complications created first by the World War and later by the chaotic state of Russia. Realizing the necessity for popular communication between Sweden and the United States, Minister Morris helped to organize Sverige-Amerika Stiftelsen and himself pledged an annual fellowship of \$1000 for a period of five years in the exchange administered by this Stiftelse and the Foundation. Minister Morris spent the Christmas holidays at his country place in Massachusetts.

MINISTER PRINCE AT HOME

John Dyneley Prince, American Minister to Denmark, came home on the storm-beaten *President Harding* on January 17. Associates of the Foundation in New York and vicinity were invited to a reception in honor of the Minister and Mrs. Prince at the home of the President of the Chapter on Monday, January 29.

THE ANGEL OF SIBERIA

Elsa Brändström, who has been called "the angel of Siberia" for acts of mercy while serving with the Swedish Red Cross in Russia, is delivering lectures in America. Miss Brändström is the daughter of the former Swedish Minister in Petrograd. Her work began in Russian camps and prison centres and with the surplus left from the fund for this, supplemented by private subscriptions and the proceeds from her book on Siberia, she has established a sanitarium in Saxony. Miss

Brändström's first lecture, delivered at the De Witt Clinton High School on February 9, was arranged by a committee on which the New York Chapter was represented.

Northern Lights

THE NOBEL PRIZES

The Nobel prizes for 1921 and 1922 have been awarded as follows: The physics prize for 1921 to Professor Albert Einstein of Germany and that for 1922 to Professor Niels Bohr of Copenhagen, Denmark. The prize in chemistry for 1921 to Professor Frederick Soddy of Oxford University, and for 1922 to Dr. Francis William Aston of Cambridge, England. The Nobel prize in literature for 1922 has been awarded by the Swedish Academy to Jacinto Benavente, the Spanish dramatist.

A TEXTBOOK FOR STUDENTS OF SWEDISH

As a companion book to his *Swedish Grammar* Edwin J. Vickner, professor of Scandinavian languages at the University of Washington, has issued *Swedish Composition and Word Study* (Augustana Book Concern, 1922), combining a review of the essential principles of Swedish grammar with a course in composition and conversation. The book should prove a great help to students having a reading knowledge of the Swedish language but deficient in its grammar.

A NORWEGIAN DICTIONARY

Professor Gisle Bothne of the University of Minnesota has been engaged for several years in compiling a Norwegian dictionary, a work beset with many difficulties but now nearing completion. Some of the peculiar problems confronting the compiler were due to the fact that Norway has two official languages, and her best authors are represented in both. While "Riksmål" is used as the basis of this work, added forms from "Landsmaal" have been incorporated.

FÖNHUS IN ENGLISH

Mikkjel Fönhus's *Troll-Elgen* which was reviewed in our annual summary of Norwegian books has been published in English translation under the title *The Trail of the Elk* by the Jonathan Capes Company of London.

A NEW HISTORY OF NORWEGIAN LITERATURE

Students of Norwegian literature will be interested to learn of the new textbook in this field, *Norsk Litteraturhistorie for Gymnasiet* by C. J. Hambro, literary editor of *Morgenbladet* in Christiania. The author's training as a philologist and educator, together with his journalistic experience, has produced a concise, clear, and entertaining history of the subject which will prove useful not only in the classroom but also in the hands of the layman.

SWEDEN'S MARRIAGE LAW

Marriage and Divorce Legislation in Sweden (Augsburg Publishing House, 1922) by J. Thorsten Sellin, assistant professor of sociology at the University of Pennsylvania, treats of a question that has been receiving much thought and attention in the Scandinavian countries. A joint commission for domestic legislation was established in 1910 for the purpose of drafting a uniform marriage law, and the new law as passed in Sweden is based on the report of this Commission. The book gives a resumé of marriage and divorce legislation in Sweden to 1915, a discussion of the new marriage law and its social significance, and, in an appendix, the marriage act of 1920.

THE FIRST SCANDINAVIAN CHAPLAIN

Simultaneously with the celebration of his fifty years jubilee as a clergyman, the Reverend Rasmus Andersen of Brooklyn has added a volume to his list of works on religious history, especially that of the Danish church in America. The present book is a biography of *Pastor Claus Laurits Clausen*, one of the founders of the Norwegian and Danish Lutheran churches, who, besides his indefatigable labor as an organizer of church work in the pioneer settlements of the Middle West, also has the distinction of being the first Scandinavian chaplain to be appointed in the United States Army, serving with the 15th Wisconsin, often referred to as the Scandinavian regiment, of which Colonel Hans Heg was the commander.

WILLIAM IVARSON IN AMERICA

The Norwegian actor, William Ivarson, is visiting America on a two months' tour in order to give his former countrymen an opportunity to hear his readings from the dramatists of Norway. In 1921 his twenty-fifth anniversary on the stage was celebrated in Bergen, where he has been associated with *Den Nationale Scene* since 1899, and on this

occasion many tributes were tendered him testifying to the high esteem in which he is held by the theatre-going people of that city. Last spring the Conrad Mohr stipend for actors was awarded him, an honor of high importance in both artistic and pecuniary value. The Holberg renaissance which has been a feature of the Bergen stage these later years is largely due to the brilliant interpretation the chief rôles have had in the capable hands of this actor.

SVEND GADE IN AMERICA

The great success attending the performance of "Johannes Kreisler," at the Apollo Theatre, New York, is due in a very large measure to the mechanical genius of Svend Gade, whose work abroad years ago marked him as one of the leading scenic instructors of to-day. Mr. Gade, who was born in Copenhagen, came to the United States for the express purpose of providing the stage equipment so essential to an adequate presentation of *Johannes Kreisler*, which is produced by the Selwyns. The lighting effects also are of his own invention and are considered among the most unique of their kind. Those who have seen *Johannes Kreisler* and marveled at the ingenious stage work which makes possible the shifting of more than forty scenes within the evening's performance may realize what skill is requisite to presenting this play.

After finishing his task in New York, Mr. Gade was getting ready to sail for Europe where he had engaged to direct the performance of Ibsen's *Peer Gynt*, in Amsterdam, when a telegram reached him from Los Angeles where Mary Pickford was anxious to have him take part in the filming of *Faust*. Negotiations were quickly concluded satisfactorily, and Mr. Gade, accompanied by Mrs. Gade, the noted Swedish opera singer, left for Hollywood, where he now is. From there he expects to return to Europe to fulfill his Amsterdam engagement.

While Mr. Gade has been especially active on the continent, his native Denmark has also had the benefit of his remarkable skill as scenic instructor. He is particularly at home with the Strindberg plays and in Copenhagen he put on the latter's *Dream Play* and *Advent*. He directed the *Hamlet* of Asta Nielsen, which film has met with an overwhelming success.

(Continued on Page 186)

Northern Lights

(Continued from Page 183)

SCANDINAVIAN TOPICS IN THE MODERN LANGUAGE ASSOCIATION

Contrary to prophecy that the first group meeting of the Modern Language Association of America devoted to Scandinavian Literature, would be attended only by the speakers and chairman, participation was larger than in some of the veteran groups. Instructors in Old Norse and modern Scandinavian languages from several of the leading Colleges of the East came to listen to the papers and take part in the discussion. Among familiar faces in the conference room were those of Professors Fife of Columbia (who lectured at the Brandes Anniversary in New York), Crowell of Brown, Wiehr of Smith (author of a recent monograph on Knut Hamsun), Johnson of Williams, President Comfort of Haverford, Weigand of the University of Pennsylvania, Lieder of Amherst (editor of the Tegnér volume in the SCANDINAVIAN CLASSICS), and Porterfield of Randolph-Macon College in Virginia (Professor Porterfield was formerly special writer on Scandinavian topics for the *New York Evening Post*). Papers were read by Professor Uppvall, Dr. Leach, and Dr. Stork, and special thanks were due the Chairman, Professor Adolph B. Benson of Yale. The conference met at the University of Pennsylvania in Christmas week. Professor George Flom was elected Chairman of the second Scandinavian group discussion at the next annual meeting of the Modern Language Association, which will be held at the University of Michigan.

SCANDINAVIAN LITERATURE IN ENGLISH

A good old favorite in Norwegian circles has now been made accessible to English readers by the translation of Elias Kræmmer's *Glade Borgere*. Its new title reads *Dry Fish and Wet; Tales from a Norwegian Seaport*, and we hope it will continue its joyful career in its enlarged sphere. W. Worster is the translator and Gyldendal of London the publisher.

PRINCE WILHELM IN AFRICA

Prince Wilhelm of Sweden's new book on Africa, *Bland dvärgar och Gorillar*, which has received much favorable comment in the Swedish press, is soon to be published in English translation by the John Lane Company

of London. This account of a region which still has the lure of the mystical and the unknown is a distinguished addition to the literature of exploration and travel. Although the reader may have considerable familiarity with the Uganda, Kongo, and Sudan, he will see them with a new charm through the clear and vivid, natural and often humorous presentation of the author, who with equal grace describes the tense suspense of an encounter with a hippopotamus and the life in a primitive negro village. He is a nature lover as well as a hunter and has no desire to bring home a heavy bag, as is evinced by his comments on the devastations of other nimrods in the region. Many excellent illustrations add to the attractiveness of the volume, which is published by Norstedt & Söner, Stockholm.

SWEDISH ART FOR CHICAGO

Through the generosity of Mr. Charles S. Peterson, Vice President of the Foundation, the Art Institute of Chicago is going to receive a Swedish collection of paintings and sculptures. The donor has pledged 10,000 kronor a year for a term of five years; and already works by Carl Larsson, Karl Skånberg, Kreuger, Alfred Wahlberg, and Karl Nordström have been purchased. Zorn has for some time been represented in the Museum by three paintings and two hundred etchings, and Prince Eugen has promised a gift of one of his most valuable paintings. It seems particularly fortunate that this collection is to be placed in Chicago because that city has the largest Swedish population in this country, and also on account of the large art school connected with the Institute, the students of which will now have the opportunity of learning to know and appreciate the art of Sweden.

CONTRIBUTIONS FOR ASTORIA CHURCH

The new Swedish church at Astoria, Long Island, plans for which are pictured in this issue, depends for funds largely on friends outside the parish who are interested in this attempt to introduce Swedish church architecture in America. Among those who have endorsed the undertaking are the Honorable Axel F. Wallenberg, Consul-General Olof H. Lamm, Dr. Henry G. Leach, Rev. Mauritz Stolpe, Dr. Börje H. Brilioth, and Mr. Gustaf Sundelius. Contributions should be sent directly to Rev. Ragnar Byrenius, 463 Third Avenue, Astoria, L. I., New York.